

USACE Environmental Support to the Army and the Nation

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HQ USACE

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US Army Corps of Engineers
BUILDING STRONG®



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Six Key Messages

- The Corps of Engineers is the Nation's Environmental Engineer.
- The Corps of Engineers is the steward of almost 12 million acres of public lands and waters in 43 states.
- The Corps carefully balances regulatory decisions to protect the nation's aquatic resources.
- The Corps restores properties and ecosystems, making both available to the public for beneficial use.
- Corps environmental projects improve quality of life by promoting sustainable economic development.
- The Corps develops and implements sustainable solutions by applying its Environmental Operating Principles.



USACE Program Areas

FY11 Military Program

\$ 26.4 B

11,100 personnel

Military Construction

Contingency Operations

Installation Support

International and
Interagency Support

Theater
Engineer
Commands

HQ
(Direct Funded)

9 Divisions
(Direct Funded)

44 Districts
(Project Funded)

Homeland Security

Environmental

Real Estate

Private
Industry
Partners

FY11 Civil Works Program

\$ 4.63 B

22,600 personnel

Navigation

Hydropower

Flood Risk Management

Ecosystem Restoration

Water Supply

Regulatory: Wetlands/Waterways

Recreation

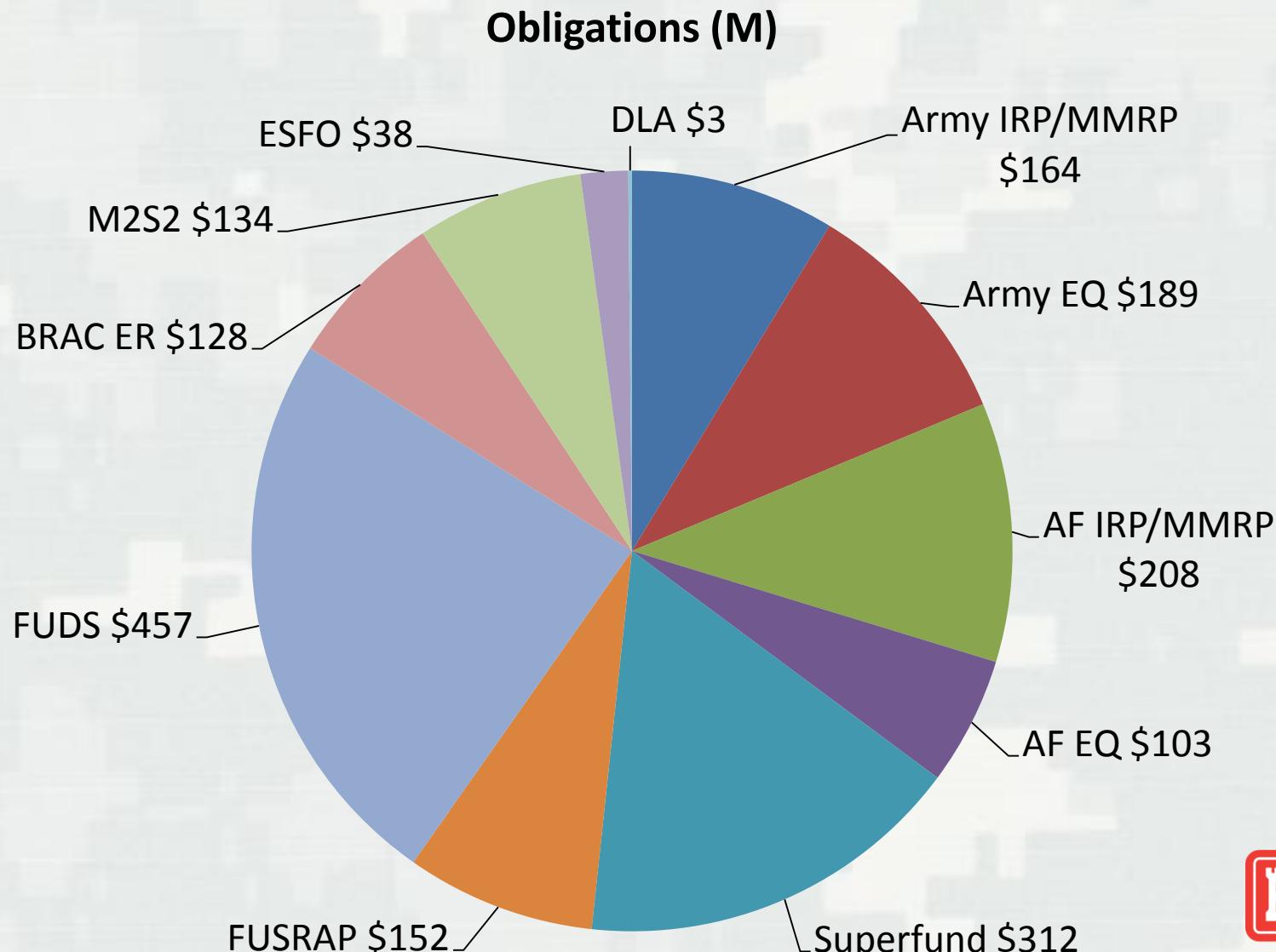
Engineer Research and Development Center

\$1.5 B (Direct and RDTE Funded)

Seven diverse research laboratories



FY11 Environmental Workload \$1.9B



USACE Environmental Programs



- Executed \$1.9 billion in environmental program and project management in FY11
 - Installation Restoration Program (IRP)
 - Base Realignment & Closure Act (BRAC)
 - Environmental Quality Support (EQ)
 - Formerly Used Defense Sites (FUDS)
 - Military Munitions Support Services (M2S2)
 - EPA Superfund
 - Support for Other Federal Agencies
 - Formerly Utilized Sites Remedial Action Program (FUSRAP)
 - Defense State Memorandum of Agreement (DSMOA)



FY11 USACE Execution for Army

Program	Total Army Project Funding	USACE Funds Received	Percentage of Army Project Funding	Percent Obligated
IRP/MMRP	\$258M	\$164M	64%	100%
EQ	\$250M	\$189M	76%	100%
BRAC	\$141M	\$128M	91%	93%
FUDS	\$428M	\$428M	100%	100%

***USACE executed over \$1 Billion of Army's
\$1.5B Environmental Program in FY11**



Army Environmental Quality (EQ)



- Provides worldwide Conservation, Pollution Prevention and Compliance (Non-Restoration) support to Active Army, Reserve components and the National Guard
- Provides EQ technical support to Installations, AEC, and ACSIM
- Executes studies and research through our labs and centers of expertise
- Provides technical support for:
 - NEPA documentation
 - BRAC environmental initiatives
 - Resource management plans
 - Invasive species management
 - Cultural resource surveys
 - Low impact development





Army Active Sites DERP



- Performs environmental restoration/clean-up on active Army and DoD sites by performing studies, developing designs, and conducting remedial actions.
- Addresses concerns such as ordnance contamination/wastes, solvents, heavy metals, pesticides, plating wastes, petroleum, oil and lubricants located in landfills, underground storage tanks, soil and fill material and aquifers.
- Much of the cleanup work now is transitioning to the Military Munitions Response Program.
- Accomplished \$161million worth of work in FY11



Army Installation Restoration Program (IRP) and Military Munitions Response Program (MMRP)



- Performs environmental restoration/clean-up on Active Army, Reserve components and the National Guard sites by performing studies, developing designs, and conducting remedial actions.
- Addresses concerns such as ordnance contamination/wastes, solvents, heavy metals, pesticides, plating wastes, petroleum, oil and lubricants located in landfills, underground storage tanks, soil and fill material and aquifers.
- Much of the cleanup work now is transitioning to the Military Munitions Response Program.



Base Realignment & Closure (BRAC)



Fort Monmouth Building 9053 at Evans Area

- USACE is execution agency in support of Army Legacy (4 rounds) and 2005 BRAC environmental, real estate, NEPA and legal actions to clean up installations nationwide.
- Transferring acreage is primary driver in BRAC program.



Formerly Used Defense Sites (FUDS)



- Environmental restoration on Defense Sites (all services) disposed of prior to 1986
- Over 10,000 potential FUDS across the country in residential areas, parks, industrial areas, schools, etc.
- ~1,800 sites remain to achieve Response Complete
- Address concerns such as military munitions, chemical warfare, PCBs, underground storage tanks, landfills and groundwater contamination

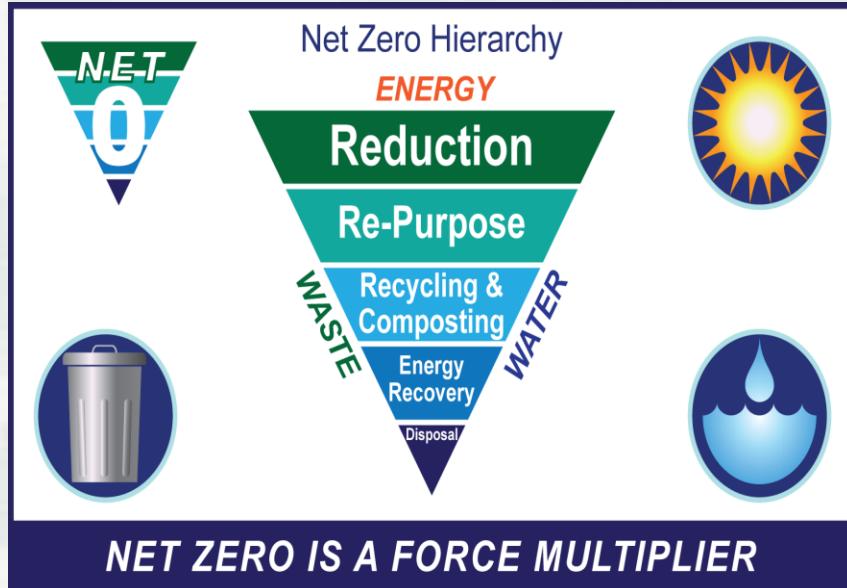


USACE Support to COCOMs

- Provides environmental technical support and project execution for OCONUS Army installations
- Supported US Forces in Iraq
 - Provided forward deployed environmental staff
 - Executed \$1.75B Coalition Munitions Clearance and Disposal Program
- Supporting US Forces in Afghanistan
 - Provides environmental staff on site and reach back capability
 - Wastewater
 - Hydrogeology
 - Water Supply
 - Hazardous material /waste management and disposal
 - Environmental baseline surveys and site closure surveys



Net Zero Installation



- **A Net Zero ENERGY Installation** produces as much energy on site as it uses, over the course of a year.
- **A Net Zero WATER Installation** limits the consumption of freshwater resources and returns water back to the same watershed so not to deplete the groundwater and surface water resources of that region over the course of a year.
- **A Net Zero WASTE Installation** reduces, reuses, and recovers waste streams, converting them to resource values with zero landfill over the course of a year.
- **A Net ZERO Installation** applies an integrated approach to management of energy, water, and waste to capture and commercialize the resource value and/or enhance the ecological productivity of land, water, and air.



Environmental and Munitions Center of Expertise (EM CX)

The EMCX supports the Army for environmental and munitions response missions across the world protecting public health and the environment.

- **Mission Activities**

- *Project document reviews and Independent technical reviews*
- *Project specific technical assistance*
 - Project site visits*
 - Project planning facilitation & technical support*
- *Participation on panels and advisory committees*
- *Technology transfer/ Lessons learned*
- *Guidance document development*
- *Training development and instruction*
- *Studies*
- *Cost estimating*



EM CX Technical Competencies

The CX has a staff of over 70 employees to provide quality assurance and technical expertise to USACE districts and the Army

- *Chemical Engineers*
- *Chemists*
- *Civil Engineers*
- *Contract Specialist*
- *Cost Engineers*
- *Cost Recovery Specialists*
- *Environmental Engineers*
- *Funds Managers*
- *Geologists*
- *Geotechnical Engineer*
- *Grants Officer*
- *Geophysicist*
- *GIS*
- *Health Physicists*
- *Hydrogeologists*
- *Industrial Hygienists*
- *Innovative Technology Advocates*
- *Legal Support/Attorneys*
- *Quality Assurance Specialist*
- *Regulatory Specialists*
- *Risk Assessors*
- *Munitions Safety Specialists*
- *Munitions Hazards Assessors*
- *Program Managers*



USACE Engineer Research & Development Center

- * 2,500 Employees (1,800 Full Time Federal)
- * 991 Scientists & Engineers
- * \$1.2 B in Unique Research Facilities & Equipment
- * \$1.5 B Annual Program
- * 77 Active Patents



Cold Regions Research and Engineering Laboratory

Hanover, NH



Construction Engineering Research Laboratory

Champaign, IL



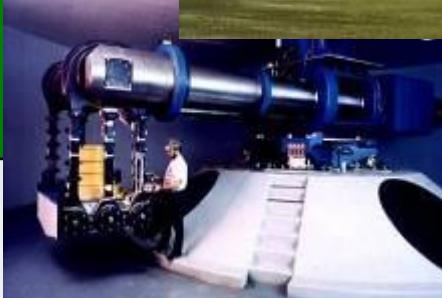
ERDC Topographic Engineering Center

Alexandria, VA



ERDC Headquarters
Coastal and Hydraulics Laboratory
Environmental Laboratory
Geotechnical and Structures Laboratory
Information Technology Laboratory

Vicksburg, MS



USACE Environmental Community of Practice

SUSTAINABILITY	RESTORATION	COMPLIANCE	PREVENTION	CONSERVATION	General/ Supporting
Green House Gas Reduction	Remediation Technologies	NEPA	Pollution Prevention Plans	Forestry Management	Geospatial Information/Tools
Green Procurement	Cost Engineering	Regulatory Compliance & Rule-making	Solid Waste Reduction	Wildlife Management	Geophysics
Green & Sustainable Remediation	Storage Tank Systems	Environmental Management Systems	Hazardous Waste Reduction	Historic Preservation	Hydrology
Low Impact Development	Data Quality	Environmental Baseline Studies (EBS)	Hazardous Materials Reduction	Archeology	Modeling
Climate Change	Emerging Contaminants	Air Quality, Water Quality	Energy Consumption/Conservation	Land Management	R&D
Watershed Management/Planning	Risk Management	Noise Abatement	Water Conservation	Wetlands / Restoration	Real Property Transactions
Environmental Dispute Resolution	Technical Project Planning	Toxics:Asbestos Radon PCBs Lead-based Paint	Process Evaluations	Coastal Zone Management	Native American Consultation
Recycling Activities	Military Munitions Cleanup	Pest Management	Review MIL Specifications	Cultural Resources	Contracting
High Performance Building Evaluations	Radioactive Waste & Materials	Solid Waste	Ozone Depleting Chemicals	Threatened, Endangered, & At-Risk Species	Regulatory
Master Planning	Long-Term Management & Optimization	EPCRA		Invasives	Safety & Occupational Health
	Transportation & Disposal				Recreation



QUESTIONS?

